

Title (en)

POWER SUPPLY SYSTEMS FOR INDUCTIVE ELEMENTS

Publication

EP 0178615 A3 19870805 (EN)

Application

EP 85112998 A 19851014

Priority

- IE 95985 A 19850416
- IE 270084 A 19841019

Abstract (en)

[origin: EP0178615A2] In a power supply system, an inductance L is connected between a rail at a voltage V, and a rail at earth through a switch S. When the switch is opened, a current $i_{₁}$ flowing from the inductance L is directed to a third rail through a diode D, voltage on the third rail rising to $V_{₂} - V_{₁}$. The system may function as a dc to dc converter with an output voltage between the $V_{₁}$ rail and the $V_{₂}$ rail equal to $V_{₂} - V_{₁}$. The system may alternatively be used in, for example, a reluctance motor drive, in which case a further inductance with associated switch and diode is included in the circuit in inverse configuration to prevent excessive voltage rise on the third rail.

IPC 1-7

H02M 3/335; H02P 6/02

IPC 8 full level

H02P 8/16 (2006.01); **H02P 25/08** (2006.01)

CPC (source: EP US)

H02P 25/092 (2016.02 - EP US); **H02P 25/0925** (2016.02 - EP US)

Citation (search report)

- [X] DE 2814706 B2 19800814
- [X] US 3913000 A 19751014 - CARDWELL JR GILBERT I
- [X] DE 2538835 A1 19760318 - HITACHI LTD
- [X] DE 3233248 A1 19840308 - LICENTIA GMBH [DE]
- [A] AT 343226 B 19780510 - ELIN UNION AG [AT]
- [A] US 3829749 A 19740813 - RICHT H
- [X] IBM TECHNICAL DISCLOSURE BULLETIN, vol. 23, no. 2, July 1980, pages 494, 495; M.B. BHUTA et al.: "Multiplexed flyback charging technique"

Cited by

EP1209790A1; EP2273669A1; EP0802623A1; US5864477A; DE19709264A1; EP2553795A4; US6628105B1; US8373346B2; WO2009019634A1

Designated contracting state (EPC)

CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0178615 A2 19860423; EP 0178615 A3 19870805; GB 2167914 A 19860604; GB 2167914 B 19890524; GB 8525557 D0 19851120;
JP H069397 U 19940204; US 4682093 A 19870721

DOCDB simple family (application)

EP 85112998 A 19851014; GB 8525557 A 19851017; JP 4916092 U 19920619; US 78903685 A 19851018